



Indiana State Department of Health

Indiana Health Alert Network Alert—April 6, 2018

UPDATE: Synthetic Marijuana Linked to Cases of Severe Bleeding and Brodifacoum Poisoning

As of April 5, Illinois public health officials have identified 89 cases of vitamin K dependent coagulopathies (bleeding) associated with synthetic marijuana use. Nine patients have tested positive for brodifacoum; two patients have died. Brodifacoum is an anticoagulant ingredient commonly found in rat poison. Since March 27, Indiana public health officials have identified two cases with direct or indirect connection to Illinois, with another under investigation. One of those cases has also tested positive for brodifacoum. Four different synthetic marijuana products from one Indiana case have tested positive for brodifacoum, along with products in Illinois. Isolated cases have been identified in other states.

Patients had INR values ranging from 6 to greater than 20 on presentation (much higher than the reference value of 1 and is considered life-threatening). Cases had prolonged hospitalization due to elevated INR values despite fresh frozen plasma (FFP) and intravenous vitamin K. Several cases in Illinois were discharged but returned to the emergency department because they were not diagnosed or improved on vitamin K for fresh frozen plasma therapy and were weaned too soon.

To date, all cases have reported using synthetic marijuana prior to illness. The effects of synthetic marijuana, commonly known as fake pot, fake weed, legal weed, spice, K2, KD, Mind Trip, OMG, Black Giant, Matrix, Scooby Snacks, AK-47, Genie, Sexy Monkey, and others, can be dangerous and sometimes life-threatening. *Due to significant anticoagulant effects of brodifacoum and related chemicals, individuals who have used these products should NOT donate blood or plasma. Donors should be asked about use of synthetic marijuana before donating. Patients with coagulopathy should be asked about any blood or plasma donation, including date and location.*

Recommendations for Health Care Providers:

- Inquire about potential exposures to synthetic marijuana (including sites of purchase) and conduct INR testing in any patient with unusual bleeding (bloody nose, hematuria,

vomiting/coughing blood, GI bleed) or coagulopathy. INR testing should be conducted even if the patient is bleeding from a single site.

- Health care providers should conduct INR testing on any patients with recent synthetic marijuana use even if those patients have not had any abnormal bleeding.
- Health care providers are encouraged to request brodifacoum testing on patients with unusual bleeding for brodifacoum and sent directly to their designated reference laboratory.
- ***Contact the Indiana Poison Center at 800-222-1222 to discuss treatment and clinical management of these patients.*** Health care providers should also identify alternative sources of vitamin K supplies if needed. Many patients have required or will require significant, long-term dosages of IV or oral vitamin K.
- Advise patients that if they and/or others they know have used any of these products and start experiencing unusual bleeding or bruising to call 911 or have someone take them to the hospital immediately. Patients should not walk or drive themselves. Advise patients to inform their health care providers about the possible link between their symptoms and synthetic marijuana use.
- Health care providers, especially those in hospital emergency departments and blood/plasma donation centers, are encouraged to post the attached flyer regarding the dangers of using these drugs.

The investigation is currently ongoing. **If a suspect case of coagulopathy is identified, please interview the patient using the attached questionnaire and report the case immediately to Mandy Billman, Overdose Surveillance Educator Epidemiologist, Indiana State Department of Health Epidemiology Resource Center, at 317-232-3190.** To report a case after hours, please call 317-233-1325 (normal ISDH hours of operation are 8:15 a.m.-4:45 p.m. EDT, Monday-Friday). Please fax questionnaires to Mandy Billman at 317-234-2812.